

CLAIMS

1. A hydraulic circuit in a work vehicle, comprising:
 - an undercarriage;
 - 5 a revolving superstructure rotatably mounted atop the undercarriage;
 - a hydraulic source disposed at the revolving superstructure;
 - at least a plurality of work hydraulic cylinders disposed
 - 10 at the undercarriage, that are to be driven by pressure oil from the hydraulic source;
 - a control valve that controls flow of pressure oil from the hydraulic source to the work hydraulic cylinders;
 - an operating means for issuing a command for drive of
 - 15 the control valve;
 - valve devices each comprising a check valve, each provided in correspondence to one of the plurality of work hydraulic cylinders to allow and prohibit outflow of pressure oil from a work hydraulic cylinder;
 - 20 a commanding means for outputting one of a command for allowing extension/contraction and a command for prohibiting extension/contraction for each of the work hydraulic cylinders; and
 - a control means for controlling each of the valve devices
 - 25 so as to allow outflow of pressure oil from the work hydraulic

cylinder by invalidating a check valve function thereof in response to the command for allowing extension/contraction output from the commanding means and so as to prohibit outflow of pressure oil from the work hydraulic cylinder with the check
5 valve in response to the command for prohibiting extension/contraction output by the commanding means.

2. A hydraulic circuit in a work vehicle according to claim 1, wherein:

10 the hydraulic circuit is formed so that oil flows between the undercarriage and the revolving superstructure via a pair of pipelines through which drive pressure is supplied to the work hydraulic cylinders and the drive pressure is then returned and that the pair of pipelines are branched in the
15 undercarriage to connect with each of the work hydraulic cylinders.

3. A hydraulic circuit in a work vehicle according to claim 1 or claim 2, wherein:

20 the valve devices are constituted as pilot-operated check valves controlled by a pilot pressure.

4. A hydraulic circuit in a work vehicle according to claim 3, wherein:

25 a pilot hydraulic circuit is formed so as to guide the

pilot pressure generated at the revolving superstructure in response to an operation at the operating means to the undercarriage via a single pilot pipeline and so as to branch the pilot pipeline in the undercarriage to connect with each
5 of the valve devices.

5. A hydraulic circuit in a work vehicle according to claim 1 or claim 2, wherein:

the valve devices are constituted as switching valves,
10 each comprising a check valve, which is controlled by an electrical signal.

6. A hydraulic circuit in a work vehicle according to any one of claims 1 through 5, further comprising:

15 a detection means for detecting an operation of the operating means, wherein:

the control means controls the valve devices so as to allow outflow of pressure oil from the work hydraulic cylinders if the command for allowing extension/contraction is output
20 from the commanding means and the operation of the operating means is detected with the detection means and so as to prohibit outflow of pressure oil from the work hydraulic cylinders under other conditions.